

IN THE CLAIMS:

Please amend claim 5, and cancel claims 4, 11, and 12, as shown in the complete list of claims that is presented below.

Claims 1-4 (canceled).

Claim 5 (currently amended): A narrow angle V-engine [as defined] comprising:

a plurality of pistons (3);

a plurality of cylinders (2) arranged alternately in two adjacent banks, the pistons (3) being installed in the cylinders (2), the cylinders (2) having combustion chambers;

a plurality of intake manifolds (50);

a plurality of exhaust manifolds (70);

intake ports (20) connecting the combustion chambers to the intake manifolds (50);

exhaust ports (30) connecting the combustion chambers to the exhaust manifolds (70);

a crankshaft (6); and

con-rods (4) which connect the pistons (2) and the crankshaft (6),

wherein the intake ports (20) of the two banks are all configured so as to pass through one of the banks, the exhaust ports (30) of the two banks are all configured so as to pass through the other bank, and an angle formed by the two banks is set to eight degrees or less, and

wherein the pistons (3) and the con-rods (4) are connected by piston pins (5), each piston pin (5) being offset further toward the center of the engine than a centerline of the respective piston (3) and the cylinder (2).

Claim 6 (previously presented): A narrow angle V-engine comprising:

a plurality of pistons (3);

a plurality of cylinders (2) arranged alternately in two adjacent banks, the

pistons (3) being installed in the cylinders (2), the cylinders (2) having combustion chambers;

a plurality of intake manifolds (50);

a plurality of exhaust manifolds (70);

intake ports (20) connecting the combustion chambers to the intake manifolds (50);

exhaust ports (30) connecting the combustion chambers to the exhaust manifolds (70);

a crankshaft (6); and

con-rods (4) which connect the pistons (2) and the crankshaft (6),

wherein the intake ports (20) of the two banks are all configured so as to pass through one of the banks, the exhaust ports (30) of the two banks are all configured so as to pass through the other bank, and an angle formed by the two banks is set to eight degrees or less, and

wherein each piston (3) has a skirt portion toward the outside of the engine that is longer than a skirt portion thereof toward the center of the engine.

Claim 7 (previously presented). A narrow angle V-engine comprising:

a plurality of pistons (3);

a plurality of cylinders (2) arranged alternately in two adjacent banks, the pistons (3) being installed in the cylinders (2), the cylinders (2) having combustion chambers;

a plurality of intake manifolds (50);

a plurality of exhaust manifolds (70);

intake ports (20) connecting the combustion chambers to the intake manifolds (50);

exhaust ports (30) connecting the combustion chambers to the exhaust manifolds (70);

a crankshaft (6); and

con-rods (4) which connect the pistons (2) and the crankshaft (6); and

a collector (60) which communicates with the intake manifolds (50), and into which the ends of the intake manifolds (50) that are opposite to the combustion chambers open, the collector being disposed closer to one of the banks than the other

wherein the intake ports (20) of the two banks are all configured so as to pass through one of the banks, the exhaust ports (30) of the two banks are all configured so as to pass through the other bank, and an angle formed by the two banks is set to eight degrees or less, and

wherein the intake manifolds (50) which are connected to the intake port (20) of cylinders in the closer bank extend to the interior of the collector (60) and open into the interior of the collector (60), whereby the lengths of the intake manifolds (50) are equalized for all of the combustion chambers.

Claim 8 (previously presented): A narrow angle V-engine comprising:

a plurality of pistons (3);

a plurality of cylinders (2) arranged alternately in two adjacent banks, the pistons (3) being installed in the cylinders (2), the cylinders (2) having combustion chambers;

a plurality of intake manifolds (50);

a plurality of exhaust manifolds (70);

intake ports (20) connecting the combustion chambers to the intake manifolds (50);

exhaust ports (30) connecting the combustion chambers to the exhaust manifolds (70);

a crankshaft (6); and

con-rods (4) which connect the pistons (2) and the crankshaft (6);

a collector (60) which communicates with the intake manifolds (50), the collector being disposed closer to one of the banks than the other; and

valves to open and close the intake ports;

wherein the intake ports (20) of the two banks are all configured so as to pass through one of the banks, the exhaust ports (30) of the two banks are all configured so as to pass through the other bank, and an angle formed by the two banks is set to eight

degrees or less, and

wherein a timing for closing the intake valves of the intake ports (20) of the cylinders in the bank farthest from the collector (60) is delayed beyond a timing for closing the intake valves of the cylinders in the bank closest to the collector (60), whereby the intake efficiency of the two banks is equalized.

Claim 9 (previously presented): A narrow angle V-engine comprising:

- a plurality of pistons (3);

- a plurality of cylinders (2) arranged alternately in two adjacent banks, the pistons (3) being installed in the cylinders (2), the cylinders (2) having combustion chambers;

- a plurality of intake manifolds (50);

- a plurality of exhaust manifolds (70);

- intake ports (20) connecting the combustion chambers to the intake manifolds (50);

- exhaust ports (30) connecting the combustion chambers to the exhaust manifolds (70);

- a crankshaft (6); and

- con-rods (4) which connect the pistons (2) and the crankshaft (6);

- a collector (60) which communicates with the intake manifolds (50), the collector being disposed closer to one of the banks than the other; and

- injectors (80R, 80L) for injecting fuel into the air in the two banks respectively,

wherein the intake ports (20) of the two banks are all configured so as to pass through one of the banks, the exhaust ports (30) of the two banks are all configured so as to pass through the other bank, and an angle formed by the two banks is set to eight degrees or less, and

wherein the attachment positions of the injectors (80R, 80L) are varied between the two banks to equalize the distance from the combustion chambers to fuel injection positions for all of the combustion chambers.

Claim 10 (previously presented): A narrow angle V-engine comprising:

a plurality of pistons (3);

a plurality of cylinders (2) arranged alternately in two adjacent banks, the pistons (3) being installed in the cylinders (2), the cylinders (2) having combustion chambers;

a plurality of intake manifolds (50);

a plurality of exhaust manifolds (70);

intake ports (20) connecting the combustion chambers to the intake manifolds (50);

exhaust ports (30) connecting the combustion chambers to the exhaust manifolds (70);

a crankshaft (6); and

con-rods (4) which connect the pistons (2) and the crankshaft (6);

a collector (60) which communicates with the intake manifolds (50), the collector being disposed closer to one of the banks than the other;

wherein the intake ports (20) of the two banks are all configured so as to pass through one of the banks, the exhaust ports (30) of the two banks are all configured so as to pass through the other bank, and an angle formed by the two banks is set to eight degrees or less, and

wherein the lengths of branch portions of the exhaust manifolds (70) which are connected to the exhaust ports (30) of the cylinders in the bank farthest from the collector (60) are increased beyond the lengths of branch portions of the exhaust manifolds (70) which are connected to the exhaust ports (30) of the cylinders in the bank closest to the collector (60), whereby the distance from the combustion chambers to a confluence portion of the exhaust manifold (70) is equalized for all of the combustion chambers.

Claims 11-12 (cancelled).